

REMARKS

The Final Office Action mailed June 26, 2008, has been received and reviewed. Claims 10 through 28, 30 through 34, and 36 through 38 are currently pending in the application. Claims 36 through 38 stand rejected. Claims 10 through 28, and 30 through 34 are allowed, and Claims 32 and 36 through 38 are objected to. Claims 36-38 have been renumbered as claims 35-37. Applicants propose to amend claims 32 and 35-37 (as renumbered). Reconsideration is respectfully requested.

Claim Objections

Claims 32 and 36 through 38 are objected to due to informalities in the claim language. Appropriate correction has been made.

35 U.S.C. § 112 Claim Rejections

Claims 37 and 38 (renumbered 36 and 37) stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse this rejection, as hereinafter set forth.

The Examiner provisionally rejected claims 37 and 38 as depending from claim 35 which does not exist. Applicants have amended claims 36, 37 and 38 as claims 35, 36 and 37. Withdrawal of the rejection is requested.

The Examiner stated that the phrase “is followed exposing the opening to a phosphoric acid-containing solution” renders claim 38 indefinite. Applicants have amended renumbered claim 37 to recite, in part, “is followed by exposing the opening to a phosphoric acid-containing solution.” Reconsideration and withdrawal of the rejection is requested.

35 U.S.C. § 102(b) Anticipation Rejections

Anticipation Rejection Based on U.S. Patent No. 4,417,385 to Temple

Claims 36 through 38 (renumbered 35 through 37) stand rejected under 35 U.S.C. § 102(b) as being anticipated by Temple (U.S. Patent No. 4,417,385). Applicants respectfully traverse this rejection, as hereinafter set forth.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Temple discloses processes for manufacturing insulated-gate semiconductor devices requiring a minimal number of photolithographic masking steps. Temple, col. 3, lines 20-24. The method includes performing an isotropic etch using a liquid mixture of hydrogen fluoride and nitric acid diluted with water to form channels through a nitride layer 90, a conductive gate layer 82 and a polysilicon gate layer 80. *Id.*, at col. 12, lines 43-67 through col. 13, lines 1-2.

Claim 35 of the presently claimed invention recites a "method of fabricating a via for a semiconductor device, the method comprising: removing at least a portion of a dielectric material exposed through an opening in an etch mask; forming an oxide polymer layer on surfaces of the opening after removing at least a portion of the dielectric layer; removing a barrier layer underlying the opening to expose at least a portion of a metal-containing layer and to form a metal polymer layer over the surfaces of the opening; exposing the opening to a nitric acid-containing solution; substantially removing the metal polymer layer without substantially removing the exposed portion of the metal-containing layer; exposing the opening to a phosphoric acid-containing solution; and substantially removing the oxide polymer layer." Support for the amendment may be found throughout the as-filed specification including, for example, page 4, line 27 – page 5, line 1.

The Examiner asserts that the numerous phrases in the claim do not add patentable weight to the claim. Applicants respectfully disagree and submit that "all words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970); MPEP § 2143.01. Applicants respectfully disagree that the cited phrases merely recite an intended use/outcome/result of a specific step. However, to expedite prosecution, applicants have amended claim 35.

Applicant respectfully submits that Temple does not anticipate independent claim 35 of the presently claimed invention because Temple fails to describe, either expressly or inherently, "substantially removing the metal polymer layer without substantially removing the exposed

portion of the metal-containing layer.” Rather, Temple describes applying an etchant that includes a liquid mixture of hydrogen fluoride and nitric acid diluted with water to remove the exposed portion of the conductive gate layer 82. The Examiner has asserted that the conductive gate layer 82 is analogous to the “metal-containing layer” of claim 10. *See* Office Action of November 14, 2007, at page 2. Because the conductive gate layer 82 is removed during the etching process, Temple does not expressly or inherently describe a method that includes substantially removing the metal polymer layer without substantially removing the exposed portion of the metal-containing layer.

As Temple fails to describe, either expressly or inherently, every element of claim 35 of the presently claimed invention, Applicant respectfully submits that claim 35 is not anticipated by Temple. Reconsideration and withdrawal of the rejection is requested.

Claims 36 and 37 are each allowable, at least, for depending from allowable claim 35.

ENTRY OF AMENDMENTS

The proposed amendments to the claims above should be entered by the Examiner because the amendments are supported by the as-filed specification and drawings and do not add any new matter to the application. Further, the amendments do not raise new issues or require a further search. Finally, if the Examiner determines that the amendments do not place the application in condition for allowance, entry is respectfully requested upon filing of a Notice of Appeal herein.

CONCLUSION

Claims 10 through 28 and 30 through 37 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, the Examiner is respectfully invited to contact Applicants' undersigned attorney.

Respectfully submitted,



Krista Weber Powell
Registration No. 47,867
Attorney for Applicants
TRASKBRITT
P.O. Box 2550
Salt Lake City, Utah 84110-2550
Telephone: 801-532-1922

Date: August 13, 2008
KWP/nj:lmh
Document in ProLaw